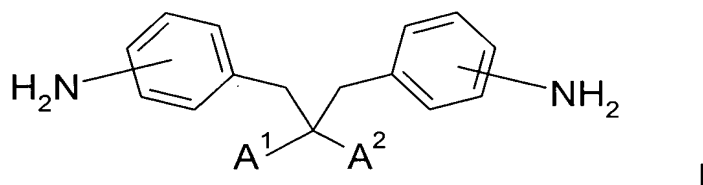


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): Diamine compounds represented by the general formula I:



wherein

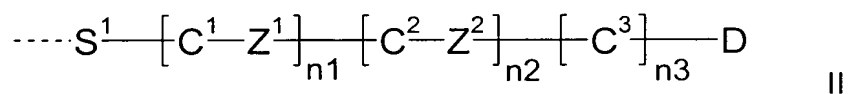
A¹ represents an organic group of 1 to 40 carbon atoms;

A² represents a hydrogen atom or an organic group of 1 to 40 carbon atoms.

2. (original): Diamine compounds according to claim 1, wherein A¹ and A² each independently represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine or chlorine, having 1 to 40 carbon atoms, wherein one or more -CH₂- groups may independently be replaced by a group B, with the proviso that oxygen atoms are not directly attached to each other, wherein B represents a group selected from -O-, -CO-, -CO-O-, -O-CO-, -NR¹-, -NR¹-CO-, -CO-NR¹-,

-NR¹-CO-O-, -O-CO-NR¹-, -NR¹-CO-NR¹-, -CH=CH-, -C≡C-, -O-CO-O- and
 -Si(CH₃)₂-O-Si(CH₃)₂- and wherein R¹ represents a hydrogen atom or lower alkyl.

3. (currently amended): Diamine compounds according to claims 1 or 2, wherein A¹ and A² each independently preferably represent a mesogen group represented by general formula II:



wherein

C¹ to C³ each independently represent an aromatic or an alicyclic group, which is unsubstituted or mono- or poly-substituted by a cyano group or by halogen atoms, or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group B;

D represents a hydrogen atom, a halogen atom, a cyano group, or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 1 to 24 carbon

atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group B, or represents a organic group having a steroid skeleton;

S¹ represents a single bond or a spacer unit such a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group B;

Z¹ , Z² each independently of the other represent a single bond or a spacer unit such a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 8 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group B;

n₁ to n₃ are each independently 0 or 1; and

B is as defined above,

with the proviso that if n₁ = n₂ = n₃ = 0 then D is a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 5 to 24 carbon atoms, wherein one or more non-

adjacent -CH₂- groups may independently be replaced by a group B, or represents a organic group having a steroid skeleton.

4. (original): Diamine compounds according to claim 3, wherein C¹ to C³ are selected from pyrimidine-2,5-diyl, pyridine-2,5-diyl, 1,4- or 2,6-naphthylene, decahydronaphthalin-2,6-diyl, 1,2,3,4-tetrahydronaphtalin-2,6-diyl, cyclohexane-1,4-diyl and 1,4-phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine having from 1 to 12 carbon atoms in which optionally one or more non-adjacent -CH₂- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

5. (currently amended): Diamine compounds according to claim 3 ~~or~~ 4, wherein C¹ to C³ are selected from cyclohexane-1,4-diyl and 1,4-phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue having 1 to 12 carbon atoms in which optionally one or more non-adjacent -CH₂- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

6. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to~~ 5, wherein D is a hydrogen atom, a fluoro atom, a chloro atom, a cyano group or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent-CH₂- groups may independently be replaced by -O-, -CO-, -CO-O-, -O-CO-,

-NR¹-CO-, -CO-NR¹-, -NR¹-CO-O-, -O-CO-NR¹-, -CH=CH-, -C≡C- and -O-CO-O-, wherein R¹ represents a hydrogen atom or lower alkyl, or represents an organic group having a steroid skeleton.

7. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to 6, wherein D is a hydrogen atom, a fluoro atom, a chloro atom, a cyano group or a straight-chain or branched alkyl residue, having 1 to 12 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH-, -C≡C- and -O-CO-O-.

8. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to 7, wherein S¹ is selected from a single covalent bond, -CO-O-, -CO-NR¹-, -CO- and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine and cyano, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group B, wherein R¹ represents a hydrogen atom or lower alkyl.

9. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to 8, wherein S¹ is selected from a single covalent bond, -CO-O-, -CO-, -(CH₂)_r-, -(CH₂)_r-O-, -(CH₂)_r-CO-, -(CH₂)_r-CO-O-, -(CH₂)_r-O-CO-, -(CH₂)_r-CO-NR¹-, -(CH₂)_r-NR¹-CO-, -(CH₂)_r-NR¹-, -CO-O-(CH₂)_r-, -CO-NR¹-(CH₂)_r-, -CO-O-(CH₂)_r-O-, -CO-NR¹-(CH₂)_r-O-, -CO-NR¹-(CH₂)_r-NR¹-, -CO-NR¹-(CH₂)_r-O-CO-, -(CH₂)_r-O-(CH₂)_s-, -(CH₂)_r-CO-O-(CH₂)_s-,

$-(CH_2)_r-O-CO-(CH_2)_s-$, $-(CH_2)_r-NR^1-CO-(CH_2)_s-$, $-(CH_2)_r-NR^1-CO-O-(CH_2)_s-$,
 $-(CH_2)_r-O-(CH_2)_s-O-$, $-(CH_2)_r-CO-O-(CH_2)_s-O-$, $-(CH_2)_r-O-CO-(CH_2)_s-O-$,
 $-(CH_2)_r-NR^1-CO-(CH_2)_s-O-$, $-(CH_2)_r-NR^1-CO-O-(CH_2)_s-O-$, $-CO-O-(CH_2)_r-O-(CH_2)_s-$ and
 $-CO-O(CH_2)_r-O-(CH_2)_s-O-$, wherein R^1 is as defined above, r and s each represent an integer
from 1 to 20, preferably from 1 to 12, and $r + s \leq 21$, preferably ≤ 15 .

10. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to 9,
wherein S^1 is selected from a single covalent bond, $-(CH_2)_r-$, $-(CH_2)_r-O-$, $-(CH_2)_r-CO-O-$,
 $-(CH_2)_r-O-CO-$, $-(CH_2)_r-CO-NH-$, $-(CH_2)_r-NH-CO-$, $-CO-O-(CH_2)_r-$, $-CO-NH-(CH_2)_r-$,
 $-CO-O-(CH_2)_r-O-$, $-CO-NH-(CH_2)_r-O-$, $-(CH_2)_r-NH-CO-(CH_2)_s-$, $-(CH_2)_r-NH-CO-O-(CH_2)_s-$,
 $-(CH_2)_r-O-(CH_2)_s-O-$, $-(CH_2)_r-NH-CO-(CH_2)_s-O-$, $-(CH_2)_r-NHCO-O-(CH_2)_s-O-$,
 $-CO-O-(CH_2)_r-O-(CH_2)_s-O-$, and $-CO-(CH_2)_r-NH-CO-(CH_2)_s-O-$, wherein r and s each
represent an integer from 1 to 12 and $r + s \leq 15$.

11. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to 10,
wherein S^1 include 1,2-ethylene, 1,3-propylene, 1,4-butylene, 1,5-pentylene,
1,6-hexylene, 1,7-heptylene, 1,8-octylene, 1,9-nonylene, 1,10-decylene, 1,11-undecylene,
1,12-dodecylene, 3-methyl-1,4-butylene, 2-(methylenoxy)ethylene, 3-
(methylenoxy)propylene, 4-(methylenoxy)butylene, 5-(methylenoxy)pentylene,
6-(methylenoxy)hexylene, 7-(methylenoxy)heptylene, 8-(methylenoxy)octylene,
9-(methylenoxy)nonylene, 10-(methylenoxy)decylene, 11-(methylenoxy)undecylene,
12-(methylenoxy)dodecylene, 2-(carbonyloxy)ethylene, 3-(carbonyloxy)propylene,

4-(carbonyloxy)butylene, 5-(carbonyloxy)pentylene, 6-(carbonyloxy)hexylene,
 7-(carbonyloxy)heptylene, 8-(carbonyloxy)octylene, 9-(carbonyloxy)nonylene,
 10-(carbonyloxy)decylene, 11-(carbonyloxy)undecylene, 12-(carbonyloxy)dodecylene,
 2-(carbonylamino)ethylene, 3-(carbonylamino)propylene, 4-(carbonylamino)butylene,
 5-(carbonylamino)pentylene, 6-(carbonylamino)hexylene, 7-(carbonylamino)heptylene,
 8-(carbonylamino)octylene, 9-(carbonylamino)nonylene, 10-(carbonylamino)decylene,
 11-(carbonylamino)undecylene, 12-(carbonylamino)dodecylene, 3-propyleneoxy,
 3-propyleneoxycarbonyl, 2-ethylenoxy, 4-butylenoxy, 4-butylenoxycarbonyl,
 3-propylenoxy, 5-pentylenoxy, 5-pentylenoxycarbonyl, 4-butylenoxy,
 6-hexylenoxy, 6-hexylenoxycarbonyl, 5-pentylenoxy, 7-heptylenoxy,
 7-heptylenoxycarbonyl, 6-hexylenoxy, 8-octylenoxy, 8-octylenoxycarbonyl,
 7-heptylenoxy, 9-nonylenoxy, 9-nonylenoxycarbonyl, 8-octylenoxy,
 10-decylenoxy, 10-decylenoxycarbonyl, 9-nonylenoxy, 11-undecylenoxy,
 11-undecylenoxycarbonyl, 10-decylenoxy, 12-dodecylenoxy,
 12-dodecylenoxycarbonyl, 11-undecylenoxy, 3-propyleneaminocarbonyl,
 4-butylenaminocarbonyl, 5-pentylenaminocarbonyl, 6-hexylenaminocarbonyl,
 7-heptylenaminocarbonyl, 8-octylenaminocarbonyl, 9-nonylenaminocarbonyl,
 10-decylenaminocarbonyl, 11-undecylenaminocarbonyl, 12-dodecylenaminocarbonyl,
 2-ethylenecarbonylamino, 3-propylenecarbonylamino, 4-butylenecarbonylamino,
 5-pentylenecarbonylamino, 6-hexylenecarbonylamino, 7-heptylenecarbonylamino,
 8-octylenecarbonylamino, 9-nonylenecarbonylamino, 10-decylenecarbonylamino,
 11-undecylenecarbonylamino, 2-(methylenoxy)ethanoyloxy, 3-(methylenoxy)propyloxy,
 3-(methylenoxy)propyloxycarbonyl, 4-(methylenoxy)butyloxy,

4-(methylenoxy)butyloxy carbonyl, 3-(methylenoxy)propanoyloxy,
 5-(methylenoxy)pentoyloxy, 5-(methylenoxy)pentoyloxy carbonyl,
 4-(methylenoxy)butanoyloxy, 6-(methylenoxy)hexoyloxy,
 6-(methylenoxy)hexoyloxy carbonyl, 5-(methylenoxy)pentanoyloxy,
 7-(methylenoxy)heptyloxy, 7-(methylenoxy)heptyloxy carbonyl,
 6-(methylenoxy)hexanoyloxy, 8-(methylenoxy)octoyloxy,
 8-(methylenoxy)octoyloxy carbonyl, 7-(methylenoxy)heptanoyloxy,
 9-(methylenoxy)nonyloxy, 9-(methylenoxy)nonyloxy carbonyl,
 8-(methylenoxy)octanoyloxy, 10-(methylenoxy)decyloxy,
 10-(methylenoxy)decyloxy carbonyl, 9-(methylenoxy)nonanoyloxy,
 11-(methylenoxy)undecyloxy, 11-(methylenoxy)undecyloxy carbonyl,
 10-(methylenoxy)decanoyloxy, 12-(methylenoxy)dodecyloxy,
 12-(methylenoxy)dodecyloxy carbonyl, 11-(methylenoxy)undecanoyloxy,
 3-(methylenoxy)propylaminocarbonyl, 4-(methylenoxy)butylaminocarbonyl,
 5-(methylenoxy)pentylaminocarbonyl, 6-(methylenoxy)hexylaminocarbonyl,
 7-(methylenoxy)heptylaminocarbonyl, 8-(methylenoxy)octylaminocarbonyl,
 9-(methylenoxy)nonylaminocarbonyl, 10-(methylenoxy)decylaminocarbonyl,
 11-(methylenoxy)undecylaminocarbonyl, 12-(methylenoxy)dodecylaminocarbonyl,
 2-(methylenoxy)ethanoylamino, 3-(methylenoxy)propanoylamino,
 4-(methylenoxy)butanoylamino, 5-(methylenoxy)pentanoylamino,
 6-(methylenoxy)hexanoylamino, 7-(methylenoxy)heptanoylamino,
 8-(methylenoxy)octanoylamino, 9-(methylenoxy)nonanoylamino,
 10-(methylenoxy)decanoylamino, 11-(methylenoxy)undecanoylamino, 12-

(methylenoxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoyloxy,
 3-(carbonyloxy)propyloxy, 3-(carbonyloxy)propyloxy carbonyl,
 4-(carbonyloxy)butyloxy, 4-(carbonyloxy)butyloxy carbonyl,
 3-(carbonyloxy)propanoyloxy, 5-(carbonyloxy)pentyloxy,
 5-(carbonyloxy)pentyloxy carbonyl, 4-(carbonyloxy)butanoyloxy,
 6-(carbonyloxy)hexyloxy, 6-(carbonyloxy)hexyloxy carbonyl,
 5-(carbonyloxy)pentanoyloxy, 7-(carbonyloxy)heptyloxy,
 7-(carbonyloxy)heptyloxy carbonyl, 6-(carbonyloxy)hexanoyloxy,
 8-(carbonyloxy)octyloxy, 8-(carbonyloxy)octyloxy carbonyl,
 7-(carbonyloxy)heptanoyloxy, 9-(carbonyloxy)nonyloxy,
 9-(carbonyloxy)nonyloxy carbonyl, 8-(carbonyloxy)octanoyloxy,
 10-(carbonyloxy)decyloxy, 10-(carbonyloxy)decyloxy carbonyl,
 9-(carbonyloxy)nonanoyloxy, 11-(carbonyloxy)undecyloxy,
 11-(carbonyloxy)undecyloxy carbonyl, 10-(carbonyloxy)decanoyloxy,
 12-(carbonyloxy)dodecyloxy, 12-(carbonyloxy)dodecyloxy carbonyl,
 11-(carbonyloxy)undecanoyloxy, 3-(carbonyloxy)propylaminocarbonyl,
 4-(carbonyloxy)butylaminocarbonyl, 5-(carbonyloxy)pentylaminocarbonyl,
 6-(carbonyloxy)hexylaminocarbonyl, 7-(carbonyloxy)heptylaminocarbonyl,
 8-(carbonyloxy)octylaminocarbonyl, 9-(carbonyloxy)nonylaminocarbonyl,
 10-(carbonyloxy)decylaminocarbonyl, 11-(carbonyloxy)undecylaminocarbonyl,
 12-(carbonyloxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoylamino,
 3-(carbonyloxy)propanoylamino, 4-(carbonyloxy)butanoylamino,
 5-(carbonyloxy)pentanoylamino, 6-(carbonyloxy)hexanoylamino,

7-(carbonyloxy)heptanoylamino, 8-(carbonyloxy)octanoylamino,
 9-(carbonyloxy)nonanoylamino, 10-(carbonyloxy)decanoylamino,
 11-(carbonyloxy)undecanoylamino, 12-(carbonyloxy)dodecylaminocarbonyl
 6-(3-propyleneaminocarbonyloxy)hexylene, 6-(3-propyleneoxy)hexylene,
 6-(3-propyleneoxy)hexyloxy, 6-(3-propyleneaminocarbonyloxy)hexyloxy,
 6-(3-propyleneaminocarbonyl)hexyl, 6-(3-propyleneaminocarbonyl)hexyloxy,
 2-(1-methyleneoxy)ethyloxy carbonyloxy, 3-(1-methyleneoxy)propyloxy carbonyloxy,
 6-(1-methyleneoxy)hexyloxy carbonyloxy, 2-(1-methyleneoxycarbonyl)ethylene,
 3-(1-methyleneoxycarbonyl)propyloxy carbonyloxy,
 6-(1-methyleneoxycarbonyl)hexyloxy carbonyloxy,
 6-(3-propyleneoxycarbonyloxy)hexylene, 6-(3-propyleneoxycarbonyl)hexylene,
 2-(1-methyleneaminocarbonyl)ethylene, 3-(1-methyleneaminocarbonyl)propylene,
 6-(1-methyleneaminocarbonyl)hexylene, 6-(3-propyleneaminocarbonyloxy)hexylene,
 6-(3-propyleneaminocarbonyl)hexylene and the like.

12. (currently amended): Diamine compounds according to ~~any one of~~ claims 3 to 11,
 wherein Z¹ and Z² are selected from a single covalent bond or a spacer unit such as a
 straight-chain or branched alkylene group, which is unsubstituted, mono or poly-substituted by
 fluoro atoms, having 1 to 8 carbon atoms, wherein one or more non-adjacent -CH₂- groups may
 independently be replaced by a group selected from -O-, -CO-, -CO-O-, -O-CO-, -NR¹-CO-,
 -CO-NR¹-, -CH=CH-, -C≡C-, and wherein R¹ represents a hydrogen atom or lower alkyl.

13. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to ~~12~~, wherein Z^1 and Z^2 are selected form a single covalent bond or a spacer unit such a straight-chain or branched alkylene group having 1 to 4 carbon atoms, wherein one or two non-adjacent $-CH_2-$ groups may independently be replaced by a group selected from $-O-$, $-CO-$, $-CO-O-$, $-O-CO-$.

14. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to ~~13~~, wherein $n_2 = 1$ and $n_3 = 1$.

15. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to ~~14~~, wherein $n_1 = 0$ with $n_2 = 1$ and $n_3 = 1$.

16. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to ~~15~~, wherein D is an organic group having a steroid skeleton if $n_1 + n_2 + n_3 = 0$.

17. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 to ~~16~~, wherein the steroid skeleton is a 3-cholesteryl or a 3-cholestanyl residue.

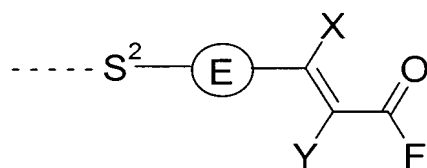
18. (currently amended): Diamine compounds according to ~~any preceding~~ claim 1, wherein A^1 and A^2 each independently preferably represent a photoreactive group which can be photoisomerized and/or photodimerized on exposure to UV or laser light.

19. (original): Diamine compounds according to claim 18, wherein the photoreactive groups are able to undergo photocyclization, in particular $[2+2]$ -photocyclization.

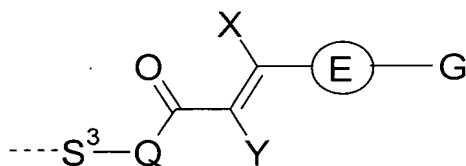
20. (currently amended): Diamine compounds according to claims 18-19, wherein the photoreactive groups are sensitive to UV or laser light, in particular linearly polarized UV light.

21. Diamine compounds according to ~~anyone of~~ claims 18 to 20, wherein the photoreactive groups include cinnamates, benzylidenephthalimidines, benzylideneacetophenes, diphenylacetylenes stilbazoles, uracyl, quinolinone, maleinimides, or cinnamylidene acetic acid derivatives, particularly preferred groups are cinnamates, coumarins, benzylideneacetophenones, or maleinimides.

22. (currently amended): Diamine compounds according to ~~anyone of~~ claims 18 to 21, wherein the photoreactive groups are represented by general formulae IIIa and IIIb:



IIIa



IIIb

wherein

- E represents pyrimidine-2,5-diyl, pyridine-2,5-diyl, 2,5-thiophenylene, 2,5-furanylene, 1,4- or 2,6-naphthylene, or phenylene, which is unsubstituted or mono- or poly-substituted by fluorine, chlorine or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group B as defined hereinabove;
- F represents -OR², -NR³R⁴ or an oxygen atom, which defines together with the ring E a coumarin unit, wherein R², R³ and R⁴ are selected from hydrogen, a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by a group J, or R³ and R⁴ together form a C₅₋₈ alicyclic ring; wherein
- J represents a group selected from -O-, -CO-, -CO-O-, -O-CO-, -NR¹-, -NR¹-CO-, -CO-NR¹-, -NR¹-CO-O-, -O-CO-NR¹-, -NR¹-CO-NR¹-, -CH=CH-, -C≡C-, -O-CO-O- and -Si(CH₃)₂-O-Si(CH₃)₂-, an aromatic or an alicyclic group, and wherein R¹ represents a hydrogen atom or lower alkyl;
- G represents a hydrogen atom, or a halogen atom, or a straight-chain or branched alkyl group which is unsubstituted, mono or poly-substituted by cyano, fluorine,

chlorine, having 1 to 24 carbon atoms, wherein one or more -CH₂- groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other;

S², S³ each independently of the other represent a single bond or a spacer unit such as a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1 to 40 carbon atoms, wherein one or more -CH₂- groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other;

Q represents an oxygen atom or -NR¹- wherein R¹ represents a hydrogen atom or lower alkyl;

X, Y each independently of the other represents hydrogen, fluorine, chlorine, cyano, alkyl optionally substituted by fluorine having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl -CH₂- groups are replaced by -O-, -CO-O-, -O-CO- and/or -CH=CH-.

23. (original): Diamine compounds according to claim 22, wherein E is selected from pyrimidine-2,5-diyl, pyridine-2,5-diyl, 2,5-thiophenylene, 2,5-furanylene, 1,4- or 2,6-naphthylene and phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine

having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl -CH₂- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

24. (currently amended): Diamine compounds according to claims 22 ~~or 23~~, wherein E is selected from 2,5-furanylene, 1,4- or 2,6-naphthylene and phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl -CH₂- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

25. (currently amended): Diamine compounds according to ~~any one of~~ claims 22 to 24, wherein F is selected from -OR² and -NR³R⁴, wherein R² and R³ represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms, wherein one or more non-adjacent alkyl -CH₂- groups may independently be replaced by -O- or -CH=CH-, wherein R⁴ is selected from a hydrogen atom or a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by -O- or -CH=CH-, or R⁴ and R⁵ together to form a C₅₋₈ alicyclic ring.

26. (currently amended): Diamine compounds according to ~~any one of~~ claims 22 to 26, wherein F is selected from the group comprising -OR² or -NHR³, wherein R² and R³ represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or

poly- substituted by fluorine atoms, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced by -O-.

27. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 26, wherein G is a hydrogen atom, or fluorine atom, or chlorine atom, or a straight-chain or branched alkyl group which is unsubstituted, mono-substituted by cyano, fluorine or chlorine or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more -CH₂- groups may independently be replaced -O-, -CO-, -CO-O-, -O-CO-, -NR¹-, -NR¹-CO-, -CO-NR¹-, -NR¹-CO-O-, -O-CO-NR¹-, -NR¹-CO-NR¹-, -CH=CH-, -C≡C- and -O-CO-O-, an aromatic or an alicyclic group, with the proviso that oxygen atoms are not directly attached to each other, and wherein R¹ represents a hydrogen atom or lower alkyl.

28. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 27, wherein G is a hydrogen atom, or a straight-chain or branched alkyl group having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH₂- groups may independently be replaced -O-, -CO-, -CO-O-, -O-CO-, -NR¹-, -NR¹-CO-, -CO-NR¹-, and -O-CO-O-, with the proviso that oxygen atoms are not directly attached to each other, and wherein R¹ represents a hydrogen atom or lower alkyl.

29. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 28, wherein S² is selected from a single covalent bond, -CO-O-, -CO-NR¹-, -CO- and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by

fluorine, chlorine, or cyano, having 1 to 24 carbon atoms, wherein one or more -CH₂- groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other, wherein R¹ represents a hydrogen atom or lower alkyl.

30. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 29, wherein S² is selected from a single covalent bond, -CO-O-, -CO-, -(CH₂)_r-, -(CH₂)_r-O-, -(CH₂)_r-CO-, -(CH₂)_r-CO-O-, -(CH₂)_r-O-CO-, -(CH₂)_r-CO-NR¹-, -CO-O-(CH₂)_r-O-, -(CH₂)_r-NR¹-CO-, -(CH₂)_r-NR¹-, -CO-O-(CH₂)_r-, -CO-NR¹-(CH₂)_r-, -CO-NR¹-(CH₂)_r-O-, -CO-NR¹-(CH₂)_r-NR¹-, -CO-NR¹-(CH₂)_r-O-CO-, -(CH₂)_r-O-(CH₂)_s-, -(CH₂)_r-CO-O-(CH₂)_s-, -(CH₂)_r-O-CO-(CH₂)_s-, -(CH₂)_r-NR¹-CO-(CH₂)_s-, -(CH₂)_r-NR¹-CO-O-(CH₂)_s-, -(CH₂)_r-O-(CH₂)_s-O-, -(CH₂)_r-CO-O-(CH₂)_s-O-, -(CH₂)_r-O-CO-(CH₂)_s-O-, -(CH₂)_r-NR¹-CO-(CH₂)_s-O-, -(CH₂)_r-NR¹-CO-O-(CH₂)_s-O-, -CO-O-(CH₂)_r-O-(CH₂)_s- and -CO-O-(CH₂)_r-O-(CH₂)_s-O-, wherein R¹ is as defined above, r and s each represent an integer from 1 to 20, preferably from 1 to 12, and r + s ≤ 21, preferably ≤ 15.

31. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 30, wherein S² is selected from a single covalent bond, -(CH₂)_r-, -(CH₂)_r-O-, -(CH₂)_r-CO-O-, -(CH₂)_r-O-CO-, -(CH₂)_r-CO-NH-, -(CH₂)_r-NH-CO-, -CO-O-(CH₂)_r-, -CO-NH-(CH₂)_r-, -CO-O-(CH₂)_r-O-, -CO-NH-(CH₂)_r-O-, -(CH₂)_r-NH-CO-(CH₂)_s-, -(CH₂)_r-NH-CO-O-(CH₂)_s-, -(CH₂)_r-O-(CH₂)_s-O-, -(CH₂)_r-NH-CO-(CH₂)_s-O-, -(CH₂)_r-NH-CO-O-(CH₂)_s-O-,

-CO-O-(CH₂)_r-O-(CH₂)_s-O-, and -CO-(CH₂)_r-NH-CO-(CH₂)_s-O-, wherein r and s each represent an integer from 1 to 12 and r + s ≤ 15.

32. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 34, wherein S² include 1,2-ethylen, 1,3-propylen, 1,4-butylen, 1,5-pentylen, 1,6-hexylen, 1,7-heptylen, 1,8-octylen, 1,9-nonylen, 1,10-decylen, 1,11-undecylen, 1,12-dodecylen, 3-methyl-1,4-butylen, 2-(methylenoxy)ethylen, 3-(methylenoxy)propylen, 4-(methylenoxy)butylen, 5-(methylenoxy)pentylen, 6-(methylenoxy)hexylen, 7-(methylenoxy)heptylen, 8-(methylenoxy)octylen, 9-(methylenoxy)nonylen, 10-(methylenoxy)decylen, 11-(methylenoxy)undecylen, 12-(methylenoxy)dodecylen, 2-(carbonyloxy)ethylen, 3-(carbonyloxy)propylen, 4-(carbonyloxy)butylen, 5-(carbonyloxy)pentylen, 6-(carbonyloxy)hexylen, 7-(carbonyloxy)heptylen, 8-(carbonyloxy)octylen, 9-(carbonyloxy)nonylen, 10-(carbonyloxy)decylen, 11-(carbonyloxy)undecylen, 12-(carbonyloxy)dodecylen, 2-(carbonylamino)ethylen, 3-(carbonylamino)propylen, 4-(carbonylamino)butylen, 5-(carbonylamino)pentylen, 6-(carbonylamino)hexylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen, 10-(carbonylamino)decylen, 11-(carbonylamino)undecylen, 12-(carbonylamino)dodecylen, 3-propylenoxy, 3-propylenoxycarbonyl, 2-ethylenoyloxy, 4-butylenoxy, 4-butylenoxycarbonyl, 3-propylenoyloxy, 5-pentylenoxy, 5-pentylenoxycarbonyl, 4-butylenoyloxy, 6-hexylenoxy, 6-hexylenoxycarbonyl, 5-pentylenoyloxy, 7-heptylenoxy, 7-heptylenoxycarbonyl, 6-hexylenoyloxy, 8-octylenoxy, 8-octylenoxycarbonyl, 7-heptylenoyloxy, 9-nonylenoxy, 9-nonylenoxycarbonyl, 8-octylenoyloxy, 10-decylenoxy, 10-decylenoxycarbonyl, 9-nonylenoyloxy, 11-undecylenoxy, 11-undecylenoxycarbonyl,

10-decylenoxyloxy, 12-dodecylenoxy, 12-dodecylenoxycarbonyl, 11-undecylenoxyloxy,
 3-propylenaminocarbonyl, 4-butylenaminocarbonyl, 5-pentylenaminocarbonyl,
 6-hexylenaminocarbonyl, 7-heptylenaminocarbonyl, 8-octylenaminocarbonyl,
 9-nonylenaminocarbonyl, 10-decylenaminocarbonyl, 11-undecylenaminocarbonyl,
 12-dodecylenaminocarbonyl, 2-ethylenoylamino, 3-propylenoylamino, 4-butylenoylamino,
 5-pentylenoylamino, 6-hexylenoylamino, 7-heptylenoylamino, 8-octylenoylamino,
 9-nonylenoylamino, 10-decylenoylamino, 11-undecylenoylamino, 2-(methylenoxy)ethanoyloxy ,
 3-(methylenoxy)propyloxy, 3-(methylenoxy)propyloxycarbonyl, 4-(methylenoxy)butyloxy,
 4-(methylenoxy)butyloxycarbonyl, 3-(methylenoxy)propanoyloxy, 5-(methylenoxy)pentyloxy,
 5-(methylenoxy)pentyloxycarbonyl, 4-(methylenoxy)butanoyloxy, 6-(methylenoxy)hexyloxy,
 6-(methylenoxy)hexyloxycarbonyl, 5-(methylenoxy)pentanoyloxy, 7-(methylenoxy)heptyloxy,
 7-(methylenoxy)heptyloxycarbonyl, 6-(methylenoxy)hexanoyloxy, 8-(methylenoxy)octyloxy,
 8-(methylenoxy)octyloxycarbonyl, 7-(methylenoxy)heptanoyloxy, 9-(methylenoxy)nonyloxy,
 9-(methylenoxy)nonyloxycarbonyl, 8-(methylenoxy)octanoyloxy, 10-(methylenoxy)decyloxy,
 10-(methylenoxy)decyloxycarbonyl, 9-(methylenoxy)nonanoyloxy,
 11-(methylenoxy)undecyloxy, 11-(methylenoxy)undecyloxycarbonyl,
 10-(methylenoxy)decanoyloxy, 12-(methylenoxy)dodecyloxy,
 12-(methylenoxy)dodecyloxycarbonyl, 11-(methylenoxy)undecanoyloxy,
 3-(methylenoxy)propylaminocarbonyl, 4-(methylenoxy)butylaminocarbonyl,
 5-(methylenoxy)pentylaminocarbonyl, 6-(methylenoxy)hexylaminocarbonyl,
 7-(methylenoxy)heptylaminocarbonyl, 8-(methylenoxy)octylaminocarbonyl,
 9-(methylenoxy)nonylaminocarbonyl, 10-(methylenoxy)decylaminocarbonyl,
 11-(methylenoxy)undecylaminocarbonyl, 12-(methylenoxy)dodecylaminocarbonyl,

2-(methylenoxy)ethanoylamino, 3-(methylenoxy)propanoylamino,
 4-(methylenoxy)butanoylamino, 5-(methylenoxy)pentanoylamino,
 6-(methylenoxy)hexanoylamino, 7-(methylenoxy)heptanoylamino,
 8-(methylenoxy)octanoylamino, 9-(methylenoxy)nonanoylamino,
 10-(methylenoxy)decanoylamino, 11-(methylenoxy)undecanoylamino, 12-
 (methylenoxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoyloxy, 3-(carbonyloxy)propyloxy,
 3-(carbonyloxy)propyloxycarbonyl, 4-(carbonyloxy)butyloxy, 4-(carbonyloxy)butyloxycarbonyl,
 3-(carbonyloxy)propanoyloxy, 5-(carbonyloxy)pentyloxy, 5-(carbonyloxy)pentyloxycarbonyl,
 4-(carbonyloxy)butanoyloxy, 6-(carbonyloxy)hexyloxy, 6-(carbonyloxy)hexyloxycarbonyl,
 5-(carbonyloxy)pentanoyloxy, 7-(carbonyloxy)heptyloxy, 7-(carbonyloxy)heptyloxycarbonyl,
 6-(carbonyloxy)hexanoyloxy, 8-(carbonyloxy)octyloxy, 8-(carbonyloxy)octyloxycarbonyl,
 7-(carbonyloxy)heptanoyloxy, 9-(carbonyloxy)nonyloxy, 9-(carbonyloxy)nonyloxycarbonyl,
 8-(carbonyloxy)octanoyloxy, 10-(carbonyloxy)decyloxy, 10-(carbonyloxy)decyloxycarbonyl,
 9-(carbonyloxy)nonanoyloxy, 11-(carbonyloxy)undecyloxy,
 11-(carbonyloxy)undecyloxycarbonyl, 10-(carbonyloxy)decanoyloxy,
 12-(carbonyloxy)dodecyloxy, 12-(carbonyloxy)dodecyloxycarbonyl,
 11-(carbonyloxy)undecanoyloxy, 3-(carbonyloxy)propylaminocarbonyl,
 4-(carbonyloxy)butylaminocarbonyl, 5-(carbonyloxy)pentylaminocarbonyl,
 6-(carbonyloxy)hexylaminocarbonyl, 7-(carbonyloxy)heptylaminocarbonyl,
 8-(carbonyloxy)octylaminocarbonyl, 9-(carbonyloxy)nonylaminocarbonyl,
 10-(carbonyloxy)decylaminocarbonyl, 11-(carbonyloxy)undecylaminocarbonyl,
 12-(carbonyloxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoylamino,
 3-(carbonyloxy)propanoylamino, 4-(carbonyloxy)butanoylamino,

5-(carbonyloxy)pentanoylamino, 6-(carbonyloxy)hexanoylamino,
 7-(carbonyloxy)heptanoylamino, 8-(carbonyloxy)octanoylamino,
 9-(carbonyloxy)nonanoylamino, 10-(carbonyloxy)decanoylamino,
 11-(carbonyloxy)undecanoylamino, 12-(carbonyloxy)dodecylaminocarbonyl,
 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenoxy)hexylen,
 6-(3-propylenoxy)hexyloxy, 6-(3-propylenaminocarbonyloxy)hexyloxy,
 6-(3-propylenaminocarbonyl)hexyl, 6-(3-propylenaminocarbonyl)hexyloxy,
 2-(methylenoxy)ethyloxycarbonyloxy, 3-(methylenoxy)propyloxycarbonyloxy,
 6-(methylenoxy)hexyloxycarbonyloxy, 2-(methylenoxycarbonyl)ethylen,
 3-(methylenoxycarbonyl)propyloxycarbonyloxy,
 6-(methylenoxycarbonyl)hexyloxycarbonyloxy, 6-(3-propylenoxycarbonyloxy)hexylen,
 6-(3-propylenoxycarbonyl)hexylen, 2-(methylenaminocarbonyl)ethylen,
 3-(methylenaminocarbonyl)propylen, 6-(methylenaminocarbonyl)hexylen,
 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenaminocarbonyl)hexylen,
 4-[[6-(methylenoxy)hexyl]oxy}phenylen, 4-[6-(methylenoxy)hexyl]cyclohexylen,
 3-methoxy-4-[[6-(methylenoxy)hexyl]oxy}phenylen,
 4-[[6-(methylenoxy)hexyl]oxy}phenylcarbonyloxy,
 4-[6-(methylenoxy)hexyl]cyclohexanoyloxy,
 3-ethoxy-4-[[8-(methylenoxy)octyl]oxy}phenylcarbonyloxy,
 4-[3-(carbonyloxy)propyl]phenylen, 4-[6-(carbonyloxy)hexyl]phenylen,
 4-[6-(carbonyloxy)hexyl]cyclohexylen, 3-methoxy-4-[6-(carbonyloxy)hexyl]phenylen,
 4-[6-(carbonyloxy)hexyl]phenylcarbonyloxy, 4-[6-(carbonyloxy)hexyl]cyclohexanoyloxy,
 3-ethoxy-4-[8-(carbonyloxy)octyl]phenylcarbonyloxy,

2-{4-4-{2-(methylenoxy)ethyl}cyclohexyl}phenyl}ethoxy, 1-[4'-{[4-(methylenoxy)butyl]oxy}-1,1'-biphenyl-4-yl]carbonyloxy, 1-{4-[4-{2-(methylenoxy)ethoxy}phenyl}methyloxy, 2-{4-[4-(2-carbonyloxyethyl) cyclohexyl]phenyl}ethoxy, 2-[4'-(4-carbonyloxybutyl)-1,1'-biphenylen-4-yl]ethoxy, 6-{4-[4-(2-carbonyloxyethyl)phenyl}hexyloxy, 5-{[4'-[4-(methylenoxy)butoxy]]-1,1'-biphenyl-4-yl]oxy}pentanoyloxy and the like.

33. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 32, S³ is selected from -CO-O-, -CO-NR¹-, -CO- and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine, or cyano, having 1 to 24 carbon atoms, wherein one or more -CH₂- groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other, wherein R¹ represents a hydrogen atom or lower alkyl.

34. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 33, wherein S³ is selected from a single covalent bond, -(CH₂)_r-, -CO-(CH₂)_r-, -CO-O-(CH₂)_r-, -CO-NR¹-(CH₂)_r-, -(CH₂)_r-O-(CH₂)_s-, -(CH₂)_r-CO-O-(CH₂)_s-, -(CH₂)_r-O-CO-(CH₂)_s-, -(CH₂)_r-NR¹-CO-(CH₂)_s-, -(CH₂)_r-NR¹-CO-O-(CH₂)_s-, and -CO-O-(CH₂)_r-O-(CH₂)_s-, wherein R¹ is as defined herein above; r and s each represent an integer from 1 to 20; and r + s ≤ 21. It is more preferred that r and s each represent an integer from 1 to 12. It is especially preferred that r + s ≤ 15.

35. (currently amended): Diamine compounds according to ~~any one of~~ claims 22 to 34, wherein S³ include 1,2-ethylen, 1,3-propylen, 1,4-butylen, 1,5-pentylen, 1,6-hexylen, 1,7-heptylen, 1,8-octylen, 1,9-nonylen, 1,10-decylen, 1,11-undecylen, 1,12-dodecylen, 3-methyl-1,4-butylen, 2-(methylenoxy)ethylen, 3-(methylenoxy)propylen, 4-(methylenoxy)butylen, 5-(methylenoxy)pentylen, 6-(methylenoxy)hexylen, 7-(methylenoxy)heptylen, 8-(methylenoxy)octylen, 9-(methylenoxy)nonylen, 10-(methylenoxy)decylen, 11-(methylenoxy)undecylen, 12-(methylenoxy)dodecylen, 2-(carbonyloxy)ethylen, 3-(carbonyloxy)propylen, 4-(carbonyloxy)butylen, 5-(carbonyloxy)pentylen, 6-(carbonyloxy)hexylen, 7-(carbonyloxy)heptylen, 8-(carbonyloxy)octylen, 9-(carbonyloxy)nonylen, 10-(carbonyloxy)decylen, 11-(carbonyloxy)undecylen, 12-(carbonyloxy)dodecylen, 2-(carbonylamino)ethylen, 3-(carbonylamino)propylen, 4-(carbonylamino)butylen, 5-(carbonylamino)pentylen, 6-(carbonylamino)hexylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen, 10-(carbonylamino)decylen, 11-(carbonylamino)undecylen, 12-(carbonylamino)dodecylen, 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenoxy)hexylen, 6-(3-propylenaminocarbonyl)hexyl, 2-(methylenoxycarbonyl)ethylen, 6-(3-propylenoxycarbonyloxy)hexylen, 6-(3-propylenoxycarbonyl)hexylen, 2-(methylenaminocarbonyl)ethylen, 3-(methylenaminocarbonyl)propylen, 6-(methylenaminocarbonyl)hexylen, 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenaminocarbonyl)hexylen, 4-[[6-(methylenoxy)hexyl]oxy}phenylen, 4-[6-(methylenoxy)hexyl]cyclohexylen, 3-methoxy-4-[[6-(methylenoxy)hexyl]oxy}phenylen, 4-[3-(carbonyloxy)propyl]phenylen, 4-

[6-(carbonyloxy)hexyl]phenylen, 4-[6-(carbonyloxy)hexyl]cyclohexylen, 3-methoxy-4-[6-(carbonyloxy)hexyl]phenylen and the like.

36. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 35, wherein Q is an oxygen atom or -NH-.

37. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 36, wherein Q is an oxygen atom.

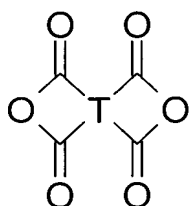
38. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 37, wherein X and Y represent hydrogen.

39. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 to 37, wherein the photoactive groups are groups of formula IIIa.

40. (currently amended): Use of a diamine compound according to ~~anyone of~~ claims 22 to 39 as precursor for the production of liquid crystal alignment layers.

41. (original): A liquid crystal orientation material obtained by the reaction of a diamine compound of general formula I.

42. (original): A polymer from the class of polyamic acids, polyamic acid esters or polyimides obtained by the reaction of a diamine compound of general formula I with one or more tetracarboxylic acid anhydride of general formula IV:



IV

wherein T represents a tetravalent organic radical.

43. (original): A polymer according to claim 42 obtained by the reaction of a diamine compound of general formula I and one or more additional diamines with one or more tetracarboxylic acid anhydride of general formula IV

44. (currently amended): A polymer according to claims 42 ~~or 43~~, wherein T is derived from an aliphatic, alicyclic or aromatic tetracarboxylic acid dianhydride.

45. (original): A polymer according to claim 44, wherein the aliphatic or alicyclic tetracarboxylic acid dianhydride is 1,1,4,4-butanetetracarboxylic acid dianhydride, ethylenemaleic acid dianhydride, 1,2,3,4-cyclobutanetetracarboxylic acid dianhydride, 1,2,3,4-cyclopentanetetracarboxylic acid dianhydride,

2,3,5-tricarboxycyclopentylacetic acid dianhydride,
 3,5,6-tricarboxynorbornylacetic acid dianhydride,
 2,3,4,5-tetrahydrofurantetracarboxylic acid dianhydride,
 rel-[1S,5R,6R]-3-oxabicyclo[3.2.1]octane-2,4-dione-6-spiro-3'-(tetrahydrofuran2',5'-dione),
 4-(2,5-dioxotetrahydrofuran-3-yl)tetrahydronaphthalene-1,2-dicarboxylic acid dianhydride,
 5-(2,5-dioxotetrahydrofuran-3-yl)-3-methyl-3-cyclohexene-1,2-dicarboxylic acid dianhydride,
 bicyclo[2.2.2]oct-7-ene-2,3,5,6-tetracarboxylic acid dianhydride,
 bicyclo[2.2.2]octane-2,3,5,6-tetracarboxylic acid dianhydride,
 1,8-dimethylbicyclo[2.2.2]oct-7-ene-2,3,5,6-tetracarboxylic acid dianhydride
 and the like.

46. (currently amended): A polymer according to claims 44 or 45, wherein the aromatic tetracarboxylic acid dianhydride is pyromellitic acid dianhydride,
 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride,
 4,4'-oxydiphthalic acid dianhydride,
 3,3',4,4'-diphenylsulfonetetracarboxylic acid dianhydride,
 1,4,5,8-naphthalenetetracarboxylic acid dianhydride,
 2,3,6,7-naphthalenetetracarboxylic acid dianhydride,
 3,3',4,4'-dimethyldiphenylsilanetetracarboxylic acid dianhydride,
 3,3',4,4'-tetraphenylsilanetetracarboxylic acid dianhydride,
 1,2,3,4-furantetracarboxylic acid dianhydride,
 4,4'-bis(3,4-dicarboxyphenoxy)diphenyl sulfide dianhydride,
 4,4'-bis(3,4-dicarboxyphenoxy)diphenyl sulfone dianhydride,

4,4'-bis(3,4-dicarboxyphenoxy)diphenylpropane dianhydride,
 3,3',4,4'-biphenyltetracarboxylic acid dianhydride,
 ethylene glycol bis(trimellitic acid) dianhydride,
 4,4'-(1,4-phenylene)bis(phthalic acid) dianhydride,
 4,4'-(1,3-phenylene)bis(phthalic acid) dianhydride,
 4,4'-(hexafluoroisopropylidene)diphthalic acid dianhydride,
 4,4'-oxydi(1,4-phenylene)bis(phthalic acid) dianhydride,
 4,4'-methylenedi(1,4-phenylene)bis(phthalic acid) dianhydride
 and the like.

47. (currently amended): A polymer according to ~~anyone of~~ claims 44 to 46, wherein the tetracarboxylic acid dianhydrides are 1,2,3,4-cyclobutanetetracarboxylic acid dianhydride, 1,2,3,4-cyclopentanetetracarboxylic acid dianhydride, 2,3,5-tricarboxycyclopentylacetic acid dianhydride, 5-(2,5-dioxotetrahydrofuran-3-yl)-3-methyl-3-cyclohexene-1,2-dicarboxylic acid dianhydride, 4-(2,5-dioxotetrahydrofuran-3-yl)tetrahydronaphthalene-1,2-dicarboxylic acid dianhydride, 4,4'-(hexafluoroisopropylidene)diphthalic acid dianhydride and bicyclo[2.2.2]oct-7-ene-2,3,5,6-tetracarboxylic acid dianhydride.

48. (currently amended): A polymer according to ~~anyone of~~ claims 43 to 47, wherein the additional diamine is ethylenediamine, 1,3-propylenediamine, 1,4-butylenediamine, 1,5-pentylenediamine, 1,6-hexylenediamine, 1,7-heptylenediamine, 1,8-octylenediamine, 1,9-nonylenediamine, 1,10-decylenediamine, 1,11-undecylenediamine, 1,12-dodecylenediamine,

α,α' -diamino-*m*-xylene, α,α' -diamino-*p*-xylene,
 (5-amino-2,2,4-trimethylcyclopentyl)methylamine, 1,2-diaminocyclohexane,
 4,4'-diaminodicyclohexylmethane, 1,3-bis(methylamino)cyclohexane,
 4,9-dioxadodecane-1,12-diamine, 3,5-diaminobenzoic acid methyl ester,
 3,5-diaminobenzoic acid hexyl ester, 3,5-diaminobenzoic acid dodecyl ester,
 3,5-diaminobenzoic acid isopropyl ester, 4,4'-methylenedianiline, 4,4'-ethylenedianiline,
 4,4'-diamino-3,3'-dimethyldiphenylmethane, 3,3',5,5'-tetramethylbenzidine,
 4,4'-diaminodiphenyl sulfone, 4,4'-diaminodiphenyl ether, 1,5-diaminonaphthalene,
 3,3'-dimethyl-4,4'-diaminobiphenyl, 3,4'-diaminodiphenyl ether, 3,3'-diaminobenzophenone,
 4,4'-diaminobenzophenone, 4,4'-diamino-2,2'-dimethylbibenzyl,
 bis[4-(4-aminophenoxy)phenyl] sulfone, 1,4-bis(4-aminophenoxy)benzene,
 1,3-bis(4-aminophenoxy)benzene, 1,3-bis(3-aminophenoxy)benzene, 2,7-diaminofluorene,
 9,9-bis(4-aminophenyl)fluorene, 4,4'-methylenebis(2-chloroaniline),
 4,4'-bis(4-aminophenoxy)biphenyl, 2,2',5,5'-tetrachloro-4,4'-diaminobiphenyl,
 2,2'-dichloro-4,4'-diamino-5,5'-dimethoxybiphenyl, 3,3'-dimethoxy-4,4'-diaminobiphenyl,
 4,4'-(1,4-phenyleneisopropylidene)bis(aniline), 4,4'-(1,3-phenyleneisopropylidene)bis(aniline),
 2,2-bis[4-(4-aminophenoxy)phenyl]propane,
 2,2-bis[3-(4-aminophenoxy)phenyl]hexafluoropropane,
 2,2-bis[3-amino-4-methylphenyl]hexafluoropropane, 2,2-bis(4-aminophenyl)hexafluoropropane,
 2,2'-bis[4-(4-amino-2-trifluoromethylphenoxy)phenyl]hexafluoropropane,
 4,4'-diamino-2,2'-bis(trifluoromethyl)biphenyl, and
 4,4'-bis[(4-amino-2-trifluoromethyl)phenoxy]-2,3,5,6,2',3',5',6'-octafluorobiphenyl.

49. (currently amended): A polymer according to ~~anyone of claims 42 to 48~~, wherein the polymer comprise as side-chains a photoreactive group that can be photoisomerized and/or photodimerized on exposure to UV or laser light.

50. (currently amended): A polymer according to ~~anyone of claims 42 to 49~~, wherein at least 75 % of repeating units include a side chain with a photoreactive group.

51. (currently amended): A polymer according to ~~anyone of claims 42 to 50~~ having an intrinsic viscosity in the range of 0.05 to 10 dL/g.

52. (currently amended): A polymer according to ~~anyone of claims 42 to 51~~ having an intrinsic viscosity in the range of 0.05 to 5 dL/g.

53. (currently amended): A polymer according to ~~anyone of claims 42 to 52~~ comprising from 2 to 2000 repeating units.

54. (currently amended): A polymer according to ~~anyone of claims 42 to 53~~ comprising from 3 to 200 repeating units.

55. (currently amended): A polymer according to ~~anyone of claims 42 to 54~~ further comprising additives such as silane-containing compounds and epoxy-containing crosslinking agents.

56. (original): A polymer according to claim 55, wherein the epoxy-containing crosslinking agents include 4,4'-methylene-bis-(*N,N*-diglycidylaniline), trimethylolpropane triglycidyl ether, benzene-1,2,4,5-tetracarboxylic acid 1,2:4,5-*N,N'*-diglycidyl diimide, polyethylene glycol diglycidyl ether, *N,N*-diglycidylcyclohexylamine and the like.

57. (currently amended): A polymer according to ~~any one of~~ claims 42 ~~to 56~~ further comprising additional additives such as a photosensitizer, a photoradical generator and/or a cationic photoinitiator.

58. (original): A polymer according to claim 57, wherein the additional additive includes 2,2-dimethoxyphenylethanone, a mixture of diphenylmethanone and *N,N*-dimethylbenzenamine or ethyl 4-(dimethylamino)benzoate, xanthone, thioxanthone, Irgacure™ 184, 369, 500, 651 and 907 (Ciba), Michler's ketone, and triaryl sulfonium salt.

59. (currently amended): A polymer layer comprising a polymer according to ~~any one~~ of claims 42 ~~to 58~~ in a crosslinked form.

60. (original): A polymer layer according to claim 59 as orientation layers for liquid crystals.

61. (currently amended): A polymer layer according to claims 59 ~~or 60~~ further comprising other polymers, oligomers, monomers, photoactive polymers, photoactive oligomers and/or photoactive monomers

62. (currently amended): Use of a polymer layer according to claims 60 ~~or 61~~ in the manufacture of optical constructional elements, preferably in the production of hybrid layer elements.

63. (currently amended): Method of preparing a polymer layer according to ~~anyone~~ of claims 59 ~~to 61~~ by applying one or more polymers according to claims 42 ~~to 58~~ to a support and, after any optional imidisation step, crosslinking the polymer or polymer mixture by irradiation with linearly polarized light.

64. (currently amended): Polymer layers according to claims 42 ~~to 58~~ having a thickness of 0.05 to 50 μm .

65. (currently amended): Use of polymer layers according to ~~anyone~~ of claims 59 ~~to 61~~ in the production of optical or electro-optical devices as well as unstructured and structured optical elements and multi-layer systems.

66. (currently amended): Optical or electro-optical device comprising one or more polymers according to ~~anyone~~ of claims 42 ~~to 58~~ in crosslinked form.

67. (original): Electro-optical devices according to claim 66 comprising more than one layer.